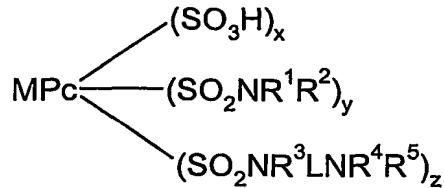


CLAIMS

1. A mixture of phthalocyanine dyes of Formula (1) and salts thereof:



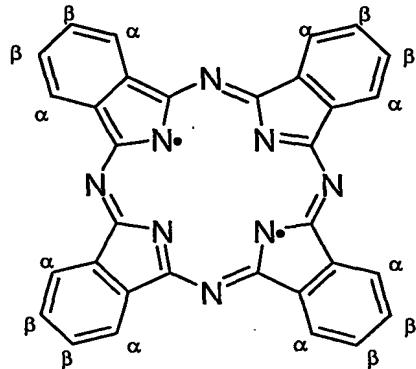
5

Formula (1)

wherein:

M is Cu or Ni;

10 Pc represents a phthalocyanine nucleus of formula;



15 L is optionally substituted C₁₋₂₀ alkylene, alkylenylene or alkynylene, optionally interrupted by -O-, -NH- or -S-;

R¹, R², R³ and R⁴ independently are H or optionally substituted C₁₋₄alkyl;R⁵ is H or an optionally substituted hydrocarbyl; orR⁴ and R⁵ together with the nitrogen atom to which they are attached represent an optionally substituted aliphatic or aromatic ring system;

20 x is 0.1 to 3.8;

y is 0.1 to 3.8;

z is 0.1 to 3.8;

the sum of (x+y+z) is 4; and

25 the substituents, represented by x, y and z, are attached only to a β-position on the phthalocyanine ring.

2. A mixture of phthalocyanine dyes according to claim 1 wherein M is Cu.

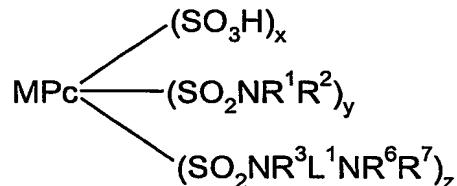
- 30 3. A mixture of phthalocyanine dyes according to either claim 1 or claim 2 wherein x

has a value of 0.5 to 3.5, y has a value of 0.5 to 3.5 and z has a value of 0.5 to 3.5.

4. A mixture of phthalocyanine dyes according to any one of the preceding claims free from fibre reactive groups.

5

5. A mixture of phthalocyanine dyes according to any one of the preceding claims of Formula (2) and salts thereof:



10

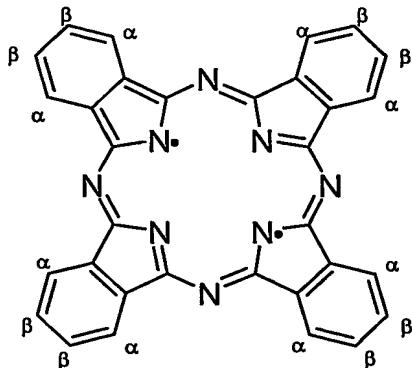
Formula (2)

wherein:

M Cu or Ni;

Pc represents a phthalocyanine nucleus of formula;

15



L¹ is optionally substituted C₁₋₈ alkylene optionally interrupted by -O-, -NH- or -S-;

R¹, R², R³ and R⁶ independently are H or optionally substituted C₁₋₄alkyl;

20 R⁷ is H, optionally substituted aryl, optionally substituted alkyl or optionally heterocyclyl; or

R⁶ and R⁷ together with the nitrogen atom to which they are attached represent an optionally substituted 5 or 6 membered aliphatic or aromatic ring;

x is 0.1 to 3.8;

25 y is 0.1 to 3.8;

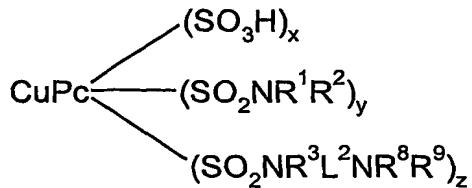
z is 0.1 to 3.8;

the sum of (x+y+z) is 4; and

the substituents, represented by x, y and z, are attached only to a β-position on the phthalocyanine ring.

30

6. A mixture of phthalocyanine dyes according to any one of claims 1 to 4 of Formula (3) and salts thereof:

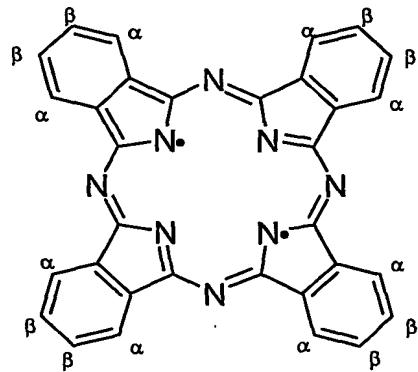


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Formula (3)

wherein:

Pc represents a phthalocyanine nucleus of formula;



10

L² is optionally substituted C₁₋₄ alkylene;R¹, R², R³ and R⁸ independently are H or methyl;R⁹ is H or phenyl bearing at least one sulfo, carboxy or phosphato substituent and having further optional substituents; or15 R⁸ and R⁹ together with the nitrogen atom to which they are attached represent an optionally substituted 5- or 6-membered aliphatic or aromatic ring;

x is 0.1 to 3.8;

y is 0.1 to 3.8;

z is 0.1 to 3.8;

20 the sum of (x+y+z) is 4; and

the substituents, represented by x, y and z, are attached only to a β-position on the phthalocyanine ring.

25 7. A composition comprising a mixture of phthalocyanine dyes according to any one of claims 1 to 7 and a liquid medium.

8. A composition according to claim 7 wherein the liquid media comprises a mixture of water and organic solvent or organic solvent free from water.

30 9. A composition according to either claim 7 or claim 8 wherein at least 70% by

weight of the total amount of phthalocyanine dye is of Formula (1).

10. A composition according to claim 9 wherein at least 95% by weight of the total amount of phthalocyanine dye is of Formula (1).

5 11. A composition according to any one of claims 7 to 10 which is an ink suitable for use in an ink jet printer.

10 12. A process for forming an image on a substrate comprising applying an ink according to claim 11 thereto by means of an ink-jet printer.

13. A material printed with a composition according to any one of claims 7 to 11 or a mixture of phthalocyanine dyes as described in any one of claims 1 to 6 or by a process according to claim 12.

15 14. An ink-jet printer cartridge comprising a chamber and an ink wherein the ink is in the chamber and the ink is as defined in claim 11.